# TOWN OF ARLINGTON TOWN MEETING ELECTRONIC VOTING STUDY COMMITTEE

April 3, 2013

Call to Order

The rescheduled regular meeting of the Town Meeting Electronic Voting Study Committee was called to order by Committee Chair Eric Helmuth in the Second Floor Meeting Room of the Town Hall Annex on Wednesday, April 3, 2013, at 7:00 PM. A copy of the notice rescheduling this meeting is attached to these minutes.

Quorum

A quorum was present: John Leone, Steve Storch, Elizabeth Patton, and Eric Helmuth.

Adam Auster arrived after the start of the meeting.

Reports and Approval of Minutes

> Proposed Bylaw

Mr. Leone said that Town Counsel Juliana Rice had suggested several changes to the proposed bylaw as voted by the Committee at its March 20 2013 meeting.

He distributed copies of a version that had been changed to reflect Ms. Rice's comments.

Those changes are to explicitly state that the decision of which voting method to use is that of the Town Moderator, and to extend the minimum period that the Town must keep records of votes available to the public if required by law.

MOTION:
Approval of
Minutes

Ms. Patton moved that the minutes of the March 20, 2013, meeting be approved.

The motion passed.

**New Business** 

MOTION: *Bylaw* 

Mr. Leone moved to revise the recommended bylaw so that the Committee's recommendation shall be to replace Article 10.C of Title I of the bylaws with the following:

All votes, unless otherwise provided by law, shall be taken in the first instance by a "yes" and "no" voice vote or by an electronic tally at the option of the Moderator. If the Moderator is in doubt as to the voice vote, or if five voters immediately question a voice vote, the Moderator shall call for a standing vote or an electronic tally, at the option of the Moderator. In an instance where the difference between the yes and no votes according to an electronic tally is less than 6 votes, then the individual votes shall be displayed.

On all questions submitted for the consideration of the Town Meeting, when requested by thirty or more Town Meeting Members present at the meeting, there shall be a roll call vote, either by voice or by an electronic vote, at the option of the Moderator. If an electronic tally was previously taken on the question, the vote of each Town Meeting Member who voted electronically in the first instance shall be displayed and recorded. All roll call votes, oral or electronic, shall be recorded so as to indicate the individual vote of each Town Meeting Member who shall have voted. Said record of roll call votes, oral or electronic, shall be available as recorded at the Town Clerk's Office.

Whenever a vote of two-thirds of the Town Meeting Members present and voting is required on any matter, the Moderator may declare a motion passed by a voice vote or electronic tally of at least two-thirds in favor. A standing vote or further electronic tally need not be taken unless required by law or these Bylaws. The Town Clerk shall record the Moderator's declaration that the motion passed by a two-thirds vote in favor.

All electronic tallies and votes shall be recorded so as to indicate the individual vote of each Town Meeting Member. These results shall be electronically available to the public for a minimum of three years, or such longer time as required by law.

The motion passed.

DISCUSSION: Committee Report

Mr. Helmuth provided a draft of the Committee's report to Town Meeting, a copy of which is appended to these minutes.

He said that he hoped to complete the report in time to include it in the Selectmen's mailing to Town Meeting members, which is scheduled to be mailed on April 9.

Committee members reviewed and commented on the draft report.

Mr. Helmuth agreed to act as editor and collate and integrate any further suggestions and proposed edits into the final report.

DISCUSSION: Committee Presentation

Mr. Helmuth said that he hoped to spend most of the next meeting discussing the Committee's presentation to Town Meeting.

Mr. Auster suggested that information related to the work of the Committee should be presented with the committee report under Article 2 of the warrant, freeing the Article 12 presentation to focus on the

proposed bylaw.

MOTION: Ms. Patton moved that the meeting adjourn.

Adjournment The motion passed.

**Adjournment** The meeting adjourned at 8:25 PM.

Adam Auster, Secretary

APPROVED

April 17, 2013 Adam Auster, Secretary

#### Documents attached to these minutes:

- 1. Notice of change of meeting time to 7 PM.
- 2. Revised bylaw proposal reflecting comments of Town Counsel.
- 3. Draft committee report to Town Meeting.

From: Eric Helmuth <eric@erichelmuth.com>

Subject: EVSC meeting officially changed to 7 pm Wednesday

Date: April 1, 2013 1:35:03 PM EDT

To: Adam Auster <adam.auster.arlington@gmail.com>, Alan Jones <jones@carr-jones.com>,

"John D. Leone, Moderator" <jdlmoderator@gmail.com>, Liz Patton

<ewpatton@verizon.net>, Ray Charboneau <rcharbon@y42k.com>, Steve Storch

<sbs.arl.ma@comcast.net>, Wes Beal <beal.wes@gmail.com>

#### Hi everyone,

I know a couple of you can't be there but I wanted to formally give notice that we've officially moved our start time Wednesday to 7 pm.

We'll review the draft of our report that I am finishing up today and plan to send late tonight, and we'll look over somenon-substantive suggestions from Juliana Rice for clarifying edits to the proposed bylaw amendments.

At 8:30 the Town Meeting Procedures committees will convene in the space as previously mentioned. You're welcome to stay.

Eric

### **Arlington Town Meeting — Substitute Motion**

#### **ARTICLE NO.12**

Dated: <u>April 3, 2013</u>

I, <u>Eric Helmuth</u>, do hereby submit the following SUBSTITUTE Motion:

**VOTED:** That Title I- General Government, Article 1: Town Meetings, Section 10. Procedural Rules, C. Votes: (Art. 13, Atm - 04/29/92), (Art. 22, Atm - 05/11/11), be and hereby is amended:

By deleting the current Title I, Article 1, Section 10. Procedural Rules, C. Votes: in its entirety and substituting the following:

All votes, unless otherwise provided by law, shall be taken in the first instance by a "yes" and "no" voice vote or by an electronic tally at the election of the Moderator. If the Moderator is in doubt as to the voice vote, or if five voters immediately question a voice vote, the Moderator shall call for a standing vote or an electronic tally, at the option of the Moderator. In an instance where the difference between the yes and no votes according to an electronic tally is less than 6 votes, then the individual votes shall be displayed.

On all questions submitted for the consideration of the Town Meeting, when requested by thirty or more Town Meeting Members present at the meeting, there shall be a roll call vote, either by voice or by an electronic vote, at the option of the Moderator. If an electronic tally was previously taken on the question, the vote of each Town Meeting Member who voted electronically in the first instance shall be displayed and recorded. All roll call votes, oral or electronic, shall be recorded so as to indicate the individual vote of each Town Meeting Member who shall have voted. Said record of roll call votes, oral or electronic, shall be available as recorded at the Town Clerk's Office.

Whenever a vote of two-thirds of the Town Meeting Members present and voting is required on any matter, the Moderator may declare a motion passed by a voice vote or electronic tally of at least two-thirds in favor. A standing vote or further electronic tally need not be taken unless required by law or these Bylaws. The Town Clerk shall record the Moderator's declaration that the motion passed by a two-thirds vote in favor.

All electronic tallies and votes shall be recorded so as to indicate the individual vote of each Town Meeting Member. These results shall be electronically available to the public for a minimum of three years, or such longer time as required by law.

	Signed:	
	Eric Helmuth, Precinct	,
Date Voted:	_	
Action Taken		

The Current Title 1, Article 1, Section 10. Procedural Rules, C. Votes: reads as follows with the new proposed language inserted or deleted *in italics* for reference:

Title I- General Government, ARTICLE 1: TOWN MEETINGS, Section 10. Procedural Rules, C. Votes: (ART. 13, ATM – 04/29/92), (ART. 22, ATM – 05/11/11)

All votes, unless otherwise provided by law, shall be taken in the first instance by a "yes" and "no" voice vote *or by an electronic tally at the election of the Moderator*. If the Moderator is in doubt as to the vote he may call *for a show of hands or* for a standing vote, or if five voters immediately question the vote, the Moderator shall call for a standing vote *or an electronic tally, at the option of the Moderator*. *In an instance where the difference between the yes and no votes according to an electronic tally is less than 6 votes, then the individual votes shall be displayed*.

On all questions submitted for the consideration of the Town Meeting, there shall be a roll call vote when requested by thirty or more Town Meeting Members present at the meeting. All roll call votes, either by voice or by an electronic vote, at the option of the Moderator. If an electronic tally was previously taken on the question, the vote of each Town Meeting Member who voted electronically in the first instance shall be displayed and recorded. All roll call votes, oral or electronic, shall be recorded so as to indicate the individual vote of each Town Meeting Member who shall have voted. Said roll call votes, oral or electronic, shall be available as recorded at the Town Clerk's Office.

Whenever a vote of two-thirds of the Town Meeting Members present and voting is required on any matter, the Moderator may declare a motion passed by a voice vote *or electronic tally*, of at least two-thirds in favor and a standing vote, *or further electronic tally*, need not be taken unless required by law or these Bylaws. The Town Clerk shall record the Moderator's declaration that the motion passed by a two-thirds vote in favor.

All electronic tallies and votes shall be recorded so as to indicate the individual vote of each Town Meeting Member. These results shall be electronically available to the public for a minimum of three years, or such longer time as required by law.

# Electronic Voting Study Committee Report to Town Meeting

April 2013

#### Introduction

#### **Background**

Electronic voting, as used in municipal legislative bodies such as Representative Town Meeting, accurately produces an instant count of the vote and an instant record of how each elected representative voted. Results from an electronic voting system are immediately displayed at the meeting and may be easily published online for public review.

Several other representative Town Meetings in Massachusetts now use electronic voting: Brookline, Framingham, Chelmsford, and Billerica. Lexington voted in March 2013 to adopt it for FY2014. The town of Wayland uses EV for open town meeting with hundreds of people voting.

Arlington Town Meeting created the Town Meeting Electronic Voting Study Committee at its 2013 Annual Town Meeting to study and make recommendations on the use of this technology for Arlington Town Meeting.

#### **Committee Membership**

The committee is comprised of Town Meeting members, and community members who are technology professionals. Members are Town Moderator John Leone, Eric Helmuth (chair), Adam Auster (Secretary), Ray Charbonneau, Liz Patton, Steve Storch, and Wes Beal. Alan Jones is a non-voting member.

## Summary of main recommendations

- **1. Amend the Town Bylaws** to permit, but not require, the use of an electronic tally and display device in for voting in Town Meeting, subject to policies and procedures determined in the bylaws and by the Town Moderator.
- **2. Appropriate funds** to rent an electronic tally and display system for use at Town Meeting in FY2014, and begin budgeting to purchase a system for subsequent years. (The Finance Committee is recommending an appropriation of \$10,000 to cover a rental for as many sessions at Annual Town Meeting 2014 as the amount will cover.)

# Summary of Conclusions

Electronic voting would significantly increase accountability to constituents by enabling more frequent recording of individual votes in a form that is easily published to the town website.

Electronic voting would likely offer some improvements over our current voting methods in the accuracy of counted votes, streamlined voting procedures, blocking current avenues for unauthorized voting, and much faster roll call votes.

Electronic voting introduces some potential concerns about ease of use, & confidence in the technology, cultural change, and a new avenue for voting fraud. However, Town Meeting can implement practices to adequately mitigate these issues.

The financial cost of electronic voting is reasonable and worth the potential benefits, in the view of the committee. Town Meeting, however, must ultimately make this determination.

Current technologies provide adequate security and operating features, and other Town Meetings have experienced high levels of acceptance and minimal difficulties with electronic voting.

#### Synopsis of the committee's work

The committee met X times from September 2012 through April 2012. We addressed the following major questions:

- 1. Is available technology feasible (secure, reliable, and easy to use)?
- 2. What does it cost to obtain and operate?
- 3. What are the potential benefits and potential concerns?
- 4. What would be the best way to obtain and implement EV for Arlington TM?

To address these questions, we:

- Visited Framingham and Brookline town meetings to observe e-voting;
- Watched online town meeting video and spoke with people from additional towns using these systems;
- Interviewed key Town of Arlington officials and personnel;
- Consulted study report and bylaws from other towns regarding electronic voting in Town meeting;
- Issued a Request for Information (RFI) to solicit technology functionality, security, and rough pricing information from vendors in the space;
- Thoroughly explored benefits and costs for various potential methods of using electronic voting in Arlington's Town Meeting.

As a result of our inquiry, the committee voted to submit warrant articles for bylaw amendments and appropriations that would enable electronic voting. The Board of Selectmen and Finance Committee have voted favorable action on these articles; please see their respective reports to Town Meeting for details.

### **How Electronic Voting Works**

Overview. The electronic voting systems on the market for small legislative bodies are essentially upgraded, more secure versions of audience response technologies that are common in high school, higher education, and professional conference settings. These systems that use wireless, TV-remote style handsets to transmit each person's vote to a central computer for tabulation and display. Versions sold for legislative use have additional features and security.

Watch electronic voting in use at Massachusetts Town Meetings

http://votevideos.wordpress.com

<u>Voting.</u> Each town Meeting member is issued a wireless handset with a unique ID number. When the Moderator announces that voting is open, each member votes by pressing buttons on his or her handset during the timed voting period, and the signals are securely transmitted via radio frequency to a receiver connected to a voting computer.

<u>Tabulation, display and publishing.</u> The voting computer contains a database of town meeting members and the unique ID of each member's handset, and has software to prepare and record the votes. The computer is connected to the projection system in the hall and the Cable TV video feed, to display the text of the vote at hand and the subsequent voting results. The total time to prepare, launch and tabulate an electronic vote can be as little as one minute, with additional results display time (1 to 2 minutes) if the votes of each Member votes are displayed. If a handset device fails, it can quickly be replaced ("hot swapped") with a new device. Required margins for a simple or 2/3 majority are automatically tabulated.

The computer tabulates, stores, and exports voting results to a standard document format that may easily be published on the town's website.

<u>Procedural options</u>. Depending on which voting system a town uses and which system options are selected, various way of using EV are possible depending on the preference of the Town Meeting. For example, voting results may be displayed as a simple counted tabulation, or full report of the individual votes for each Member. Voting results, whether simple vote tallies or individual votes, can be displayed during the open voting period, or not until the voting period expires.

The different ways EV can be used in Town Meeting are illustrated at <a href="http://votevideos.wordpress.com/">http://votevideos.wordpress.com/</a>, a website created by a committee member. It features captured public access TV video from several Massachusetts town meetings using EV, with explanatory notes.

<u>Security and verification</u>. Security is enforced and votes are verified with various technologies, depending on the particular system chosen. Some available handsets provide a visual return confirmation of a person's vote from the voting computer. See sections **XX**, *Benefits and Concerns*, and Section **XX**, *Vendor Investigation*, for a full discussion.

Management of handsets. In the practice of other towns currently using these systems, voting handsets are distributed to TMM immediately after they check in with the Town Clerk's staff. In our observations at Brookline and Framingham Town Meeting, handset check-in was rapid and did not cause backups at the door. Handsets are collected each night when members leave; most towns provide bins for rapid mass return and the remotes are later checked in and re-filed before the next session. Many towns use a small group of TMM volunteers to hand out remotes at the beginning and check them back in at the end. All towns use paid personnel, either a town employee or a contractor, to operate the voting computer.

## **Benefits and Concerns of Electronic Voting in Town Meeting**

As with the adoption of any new technology, the implementation of Electronic Voting (EV) in Arlington Town Meeting would offer benefits relative to current practice, while introducing some new concerns.

#### BENEFITS

A properly-implemented EV system can deliver tangible benefits to Town Meeting, primarily in increasing public information about TM proceedings, but also with efficiency and precision of voting. These benefits would enhance the accountability of our Representative Town Meeting to constituents, and may enhance public confidence and interest in Town Meeting.

#### Increased accountability, via more recorded votes available to the public

The greatest benefit of electronic voting to a Representative Town Meeting is the opportunity to easily and quickly record and publish how individual Town Meeting Members voted. Currently, a member-by-member voting record is available only with a time consuming voice roll call, which is very rare. An EV system would allow Town Meeting to take such votes with the required accuracy but with dramatically less time. It is up to Town Meeting and the Moderator to determine which votes are taken this way, but recording and publishing more individual votes – especially on substantive motions – would substantially increase transparency and accountability in the Town's democratic process, further elevating Town Meeting as a true representative legislative body. This change may also encourage attendance at Town Meeting, since the presence of absence of a member at a given time may be inferred by the presence or absence of a given vote.

Additionally, public access to TMM voting records on a wide spectrum of issues provides a much more complete view of a given representative's record compared to current practice, in which public roll call votes are taken only for the most controversial issues. To the committee's knowledge, all Massachusetts

Town Meetings currently using EV regularly publish individual vote reports to their town's website, and they report widespread acceptance of this practice by Town Meeting Members and by the community at large.

#### Improvements in counted votes

Using EV in place of standing votes provides for a higher degree of accuracy than current practice, since fast and extremely precise counts are inherently part of such a system. Electronic voting is at least as quick as a standing vote and can be faster, depending on how it is implemented. Additionally, Town Meeting could use EV to take more counted votes in place of voice voting without sacrificing significant meeting time. This could eliminate the need for a separate votes on a motion (voice vote followed by a standing vote) when desired.

Importantly, Town Meeting can and should decide which votes should be taken electronically, in accordance with the desired culture and processes for the meeting. In our study of other Town Meetings, we observed considerable procedural variety in this regard, as seen on at <a href="http://votevideos.wordpress.com">http://votevideos.wordpress.com</a>.

#### Protection against current avenues for unauthorized voting

Because EV systems employ uniquely identified handsets to enter votes, they greatly reduce the potential for inadvertent or intentional votes made by unauthorized individuals, such as non-members who are improperly inside the enclosure on a standing vote, or who contribute to voice votes from the gallery.

#### **CONCERNS**

The Committee addressed the following concerns that are likely to arise when considering the adoption of an EV system for Town Meeting. Where appropriate, mitigation approaches for the concerns are discussed. However, Town Meeting must ultimately determine whether the benefits of EV enumerated above outweigh any of these concerns.

#### **Integrity of the vote**

One of the most significant concerns is whether a selected EV system will provide accurate tallies. EV systems ensure the integrity of wirelessly collected votes by a number of means, including:

- <u>Wireless transmission mechanisms</u> that are designed to continue to provide robust communication in the presence of inadvertent or intended (malicious) radio frequency (RF) interference.
- <u>Transmission ranges</u> that are suitable for the size of the meeting hall, ensuring that all transmitted votes will reach the receiver associated with the vote tallying computer system.
- <u>Authentication</u>: Linkage of uniquely-formatted voting data transmissions to unique handset devices that are assigned to specific Town Meeting Members, and which are distributed and collected in a controlled manner.
- <u>Positive real-time feedback</u> to the handset user acknowledging that a keyed-in yes, no, or abstain vote has been received by the system.
- <u>Public onscreen display</u> of voting results after the voting window closes, enabling each TM Member to further confirm the accuracy of his/her own vote.
- <u>Procedures</u> put in place to address incorrectly recorded or missed votes detected as a result of onscreen review or originating from a failed handset.

#### Potential for fraud

Of equal concern is whether EV systems open up avenues for fraudulent voting that make them significantly easier to abuse than current non-electronic voting procedures.

Specific concerns may include:

- <u>Use of unauthorized devices</u>: The handsets used by EV systems are typically commercial off the shelf items available for public purchase. Linkage of specific handsets to specific Town Meeting Members (as described above), along with handset distribution controls during the meeting, effectively mitigate against potential misuse.
- <u>Multiple voting</u>: The EV system is designed so as to record only one vote per Member during each time-limited open voting window, which is generally the last yes, no, or abstain vote entered on a Member's handset before the window closes. Thus, a Member can change his or her vote (typically to correct for an initial mis-keying), with only the final, and assumed to be correct, vote included in the tally.
- Proxy voting: EV systems do not provide any direct technical safeguards against proxy voting where a handset properly registered and checked out to a particular Town Meeting Member is provided to a non-authorized person for voting. Public displays of vote results after voting closes, where votes attributed to currently absent Members may be observed, offer protection against this risk. In addition, it may be apparent to others in the hall when an individual is using one or more devices to vote in such an unauthorized manner. The proposed bylaw amendments include a requirement mandating immediate public display of all individual member votes when the margin of Yes/No votes is very small, thus ensuring that the strongest detection method is always employed in situations where proxy voting would be the most harmful.

#### Ease of use and change to procedures

Adoption of a new voting method risks some initial confusion about use of the technology and related procedural changes. Other towns have successfully addressed this issue by offering training sessions to Town Meeting Members prior to the system's first use, creating an instructional video on system use, and/or running test votes prior to a meeting's actual votes until comfort with the system is achieved by the Members.

A related issue is the effect of adopting and implement EV on Town officials who would be affected by the changes. The committee consulted the Town Clerk, Chief Technology Officer, Town Manager and the town's Webmaster to fully explore the implications to their work. All parties indicated a high degree of comfort with their ability to support EV based on the information currently known.

#### **Accessibility for Persons with Disabilities**

Appropriate accommodation would be made for any Town Meeting members with physical limitations resulting in difficulties with the use of an EV handset and/or review of voting result screens. The specific accommodation required would depend on the needs of the individual. Other towns using e-voting in Town Meeting have adopted policies that would assign an official aide to individuals requiring assistance in using e-voting equipment, such as telling the voter which button has been pushed, reading out the handset's visual feedback, and reading the Member's vote when it is displayed in the hall.

If Arlington Town Meeting votes to adopt electronic voting, the Committee would consult the Town of Arlington Disability Commission to recommend appropriate policies for accommodations to the Moderator in light of the particular voting equipment the Town obtains.

#### **System failures**

A deployed EV system, like any other computer-based technology, can fail at a critical time. While outages should be very rare, the proposed bylaw amendments fully permit use of the same non-electronic voting methods in use today.

## **Vendor/Technology Investigation**

Our inquiry into specific electronic voting systems on the market was limited to establishing the feasibility and cost of these products. The committee decided that recommending a specific vendor at this stage would be premature. Should Arlington Town Meeting vote to authorize and fund electronic voting, the Town IT department and Town Manager's office, in consultation with the Clerk, Moderator, and Electronic Voting Study Committee, will perform a robust vendor evaluation and procurement process before selecting a specific product and services package.

Our investigation focused on security, desired operating features, reliability, technical compatibilities, cost, and the general parameters for purchasing or leasing a system.

To determine that adequate systems are available, we:

- Observed electronic voting in action in other local communities having representative town meetings and spoke with town meeting or town officials about their experience with the systems.
- Read detailed reports from electronic voting study and selection committees from other Town Meetings in Massachusetts, many of whom spent several years carefully evaluating technologies.
- Issued a detailed Request for Information (RFI) to ascertain operating features, security measures, and costs for currently available technologies. We invited RFI responses from the two vendors who had sold or leased EV systems to other TM in Massachusetts as of that time. The RFI document and detailed vendor responses are available on our committee's website at <a href="https://www.arlingtonma.gov/evsc">www.arlingtonma.gov/evsc</a>.

Based on this investigation, the committee concluded that the available technologies are sufficient in all important respects.

**NOTE FROM THE CHAIR:** The following sections are unfinished. Bullet points for proposed key points are included.

#### **Financial Costs**

Procuring and operating an EV system will require a financial commitment by the town, with both upfront as well as recurring costs. EV systems currently on the market are available for purchase, or as rental/lease arrangement which can include vendor-supplied personnel to operate and maintain the equipment.

- Purchase option
  - o Estimates provided in RFI
  - Estimated additional annual costs
  - Our long term recommendation because we believe the town can operate the system itself and it's likely to be a better value
- Lease/rental and service agreement option

- o Estimates from RFI
- Estimated annual costs
- Our short term recommendation, in consultation with Finance Committee. Briefly explain capital expenditure issue and the desire to allow TM to try out the system before making a purchase committment

### **Committee Recommendations**

- Brief enumeration of Warrant articles submitted
- Brief explanation of what the propsed Bylaw amendments will do
  - o Permits but doesn't require evoting
  - Leaves the current voting processes as equal options
  - Specify a limited number of policies
    - Close votes (proxy vote protection)
    - Allows a previous EV to be used as an official roll call vote
      - It is also possible to re-vote and someone may offer an amendment thereto, if desire (??)
    - Always make individual vote data available to public regardless of whether or not they are part of an official roll call
    - Grants discretion for operating procedure and policies to the Moderator
- Financial/Appropriation recommendation
  - Explain FinCom vote and what it would fund
  - o Supports FinComs determination to rent vs buy for the first year
  - Favors capital planning process to purchase a system as early as FY2015, pending the approval of Town Meeting next year which is likely contingent on a positive experience with the rental.

## **Appendices**

- A. Questions and Answers (next page in this draft)
- B. Bylaw amendment proposal (redlined)
- C. Copy of FinCom vote for appropriation

# Questions & Answers About Wireless Voting at Town Meeting

# Why does the Town Meeting Electronic Voting Study Committee recommend using an electronic-voting system to count votes at Town Meeting? Is the current system flawed?

The Committee feels such a system would provide greater accountability and communication to Arlington residents in the form of a record of votes at Town Meeting. That, rather than time savings, is the principal benefit. The Committee emphatically does not believe the way we have been doing business for a hundred years is broken. Rather, we feel that this technology can fulfill even better the democratic promise of the Town Meeting form of government.

#### Wouldn't wireless voting also save time?

It might, depending on how it is used. However, the operation of the system is not instantaneous. Except for roll-call votes, which take 40 minutes under the current system, voting will probably take roughly the same amount of time.

#### **How would Town Meeting members vote electronically?**

Members would be issued a voting handset, like a TV remote, when they check in each night. They would vote by pressing "yes," "no," or a third button corresponding to "abstain" or "present." Each handset would be numbered and assigned to the member who checked it out. Members would return the handsets as they leave the meeting for the night.

#### What forms would electronic voting take?

The proposed bylaw provide for an *electronic tally*, which produces a yes-no count and is analogous to the standing vote, and an *electronic roll-call*, which produces a member-by-member list of yes, no, and present votes analogous to the traditional roll call.

The proposal would preserve the current rules that give five members the right to rise and doubt the result of a voice vote and thirty members the right to rise and request a roll-call vote. The proposal also creates a new option, which is to allow (but not require) a wireless vote in the first instance, in lieu of a voice vote.

#### Who would decide when to use electronic voting?

The Town Moderator.

#### Why wouldn't the Moderator always use the system?

The Moderator might use a voice vote for routine procedural motions to save time, or because of problems operating the system on any particular night.

# What are the differences, as proposed, between the electronic tally and the electronic roll call?

The tally produces an aggregate count of yes and no votes, which may become part of the official record of the meeting. The roll call produces a member-by-member roll call, which will always become part of the official record.

Roll-call votes are also subject to review and correction by members before the vote is final. This would probably take the form of displaying voting results on screen for members to check accuracy.

All votes however would produce a member-by-member voting record, like a roll call, that the Town would make available to the public even if not part of the official record.

#### Are there other benefits of electronic voting?

Yes. Wireless voting eliminates or mitigates several possible sources of fraud or error, such as nonmembers sitting in the enclosure and voting. Only handset votes would be counted.

#### Are there any disadvantages of electronic voting?

The primary disadvantage is the cost of leasing or owning and operating the system. Also, the practice of voting using remote handsets introduces the possibility of a new kind of fraud, in the form of illegal proxy voting (e.g. a member gives their handset to another member to illicitly delegate their vote). The Committee has proposed a measure to discourage proxy voting.

Generally, the Committee finds that wireless voting is likely to be more accurate than the voting methods we currently enjoy. Illegal voting is not unknown at Town Meeting today when nonmembers enter the enclosure or add their voices to voice votes. Electronic voting avoids the opportunities for these errors (or frauds).

## What about computerized fraud, in which electronic data are deliberately intercepted or altered?

The electronic voting systems in use today are very secure from manipulation. They use dedicated wireless handsets that interact directly with the system, not an internet connection. Data are encrypted, and handsets are assigned to individual voters with each handset accounted for.

The bylaw recommended by your committee also provides for review and correction of all formal roll-call votes (invoked by 30 members) and of all close votes that are conducted electronically.

#### How much will it cost to operate and lease or purchase a wireless voting system?

As of this writing, lease costs run about \$1,000 per night. The most expensive system costs \$26,000. The Committee thinks that operating costs, chiefly staff time, would likely be about \$100 per night. There could be annual costs of about \$500 associated with owning a system.

#### Is this worth the expense?

That's the question for Town Meeting. It's hard to put a price tag on democracy.

#### Why is this year's proposal to lease a system next year, rather than to buy one?

The Finance Committee has recommended an appropriation of up to \$10,000 for electronic voting next year. This might cover 8 nights or so. Purchase might be an option for 2015, after review by the Capital Planning Committee and a further appropriation by the 2014 Annual Town Meeting. The capital-planning process spans several years so it was not possible to include such an appropriation in this year's capital budget.

# Who will decide which system to lease or purchase, if Town Meeting approves the bylaw and the appropriation?

The Town will bid the lease or purchase through its standard procurement process. The Town Manager will award the contract. The Committee has already developed a Request for Information that describes many possible requirements for a system that may for the basis for a Request for Proposals.